



United States Department of the Interior

BUREAU OF RECLAMATION

Great Plains Region

Montana Area Office

P.O. Box 30137

Billings, Montana 59107-0137



IN REPLY REFER TO: MT-450

April 17, 2014

FAXOGRAM: Water Order Change

To: Chief, Power Supply and Billing Division, WAPA, Watertown, South Dakota
Attention: F-6001
Chief, Power Dispatching Branch, WAPA, Loveland, Colorado
Attention: J-4120
Facilities Manager, Hardin, Montana
Attention: MT-300: Tom Tauscher
Project Manager, Mills, Wyoming
Attention: WY-4000, WY-4100, WY-6040
Assistant Superintendent, National Park Service, Lovell, Wyoming
Attention: Valerie Newman

From: Reservoir and River Operations, Billings, Montana /s/ Tim H. Felchle

Subject: **Yellowtail Water Release Order - BHR No. 14-37**

CURRENT RESERVOIR CONDITIONS

Elevation: 3610.93; Storage: 769,412 acre-feet; River Release: 6,500 cfs; Inflow: 5,270 cfs;

GENERAL COMMENTS:

Mountain snowpack in the Bighorn River Basin continues to remain at 135% of average. Releases out of Boysen and Buffalo Bill Reservoirs have been increased. To continue evacuating storage in Bighorn Lake as planned in preparation for the anticipated snowmelt runoff, releases out of Yellowtail Dam will be increased. In response the following operations are required at Yellowtail Dam, Powerplant, and Afterbay Dam.

SPECIAL NOTE: To provide the proper mixing of water releases to the Bighorn River in attempt to minimize PSAT levels, it is desirable to maintain the Yellowtail Afterbay Reservoir at or above elevation 3184.50 feet and provide a mixing flow of approximately 85% through the spillway gates and 15% through the sluice gates, plus or minus 5%.

As described in Yellowtail Water Release Order BHR No. 13-29, the Yellowtail Dam tailrace elevation must be maintained no higher than elevation 3190.0 feet.

YELLOWTAIL TURBINE RELEASE:

At 0800 hour on Friday, April 18, 2014:

Increase average daily turbine release to 6,930 cfs (\approx 5,100 MW-Hours/day using 32.6 cfs/mw).

At 0800 hour on Saturday, April 19, 2014:

Increase average daily turbine release to 7,430 cfs (\approx 5,470 MW-Hours/day using 32.6 cfs/mw).

AFTERBAY RELEASE AND OPERATION:

At 0800 hour on Friday, April 18, 2014:

Maintain diversions to the Bighorn Canal at 0 cfs.

Increase river release to 7,000 cfs (gauge height = 62.42 using a shift of +0.18).

Increase total release from the Afterbay to 7,000 cfs.

At 0800 hour on Saturday, April 19, 2014:

Maintain diversions to the Bighorn Canal at 0 cfs.

Increase river release to 7,500 cfs (gauge height = 62.63 using a shift of +0.18).

Increase total release from the Afterbay to 7,500 cfs.